50. STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

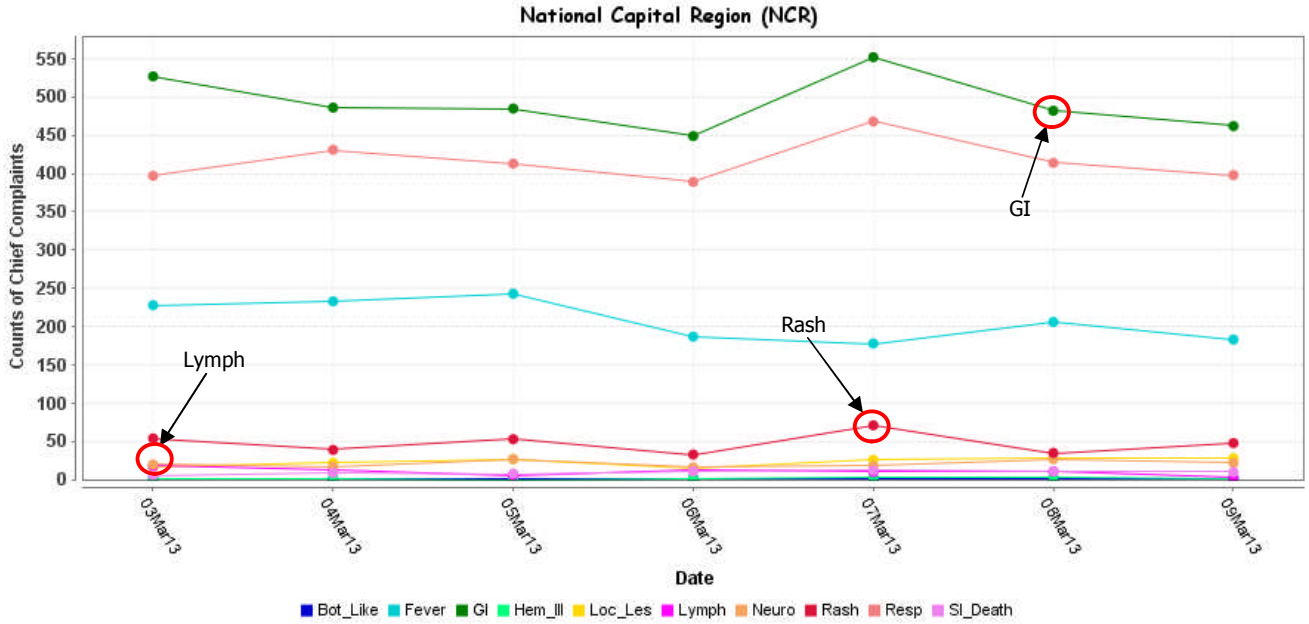
March 15, 2013

Public Health & Emergency Preparedness Bulletin: # 2013:10
Reporting for the week ending 03/09/13 (MMWR Week #10)

CURRENT HOMELAND SECURITY THREAT LEVELS

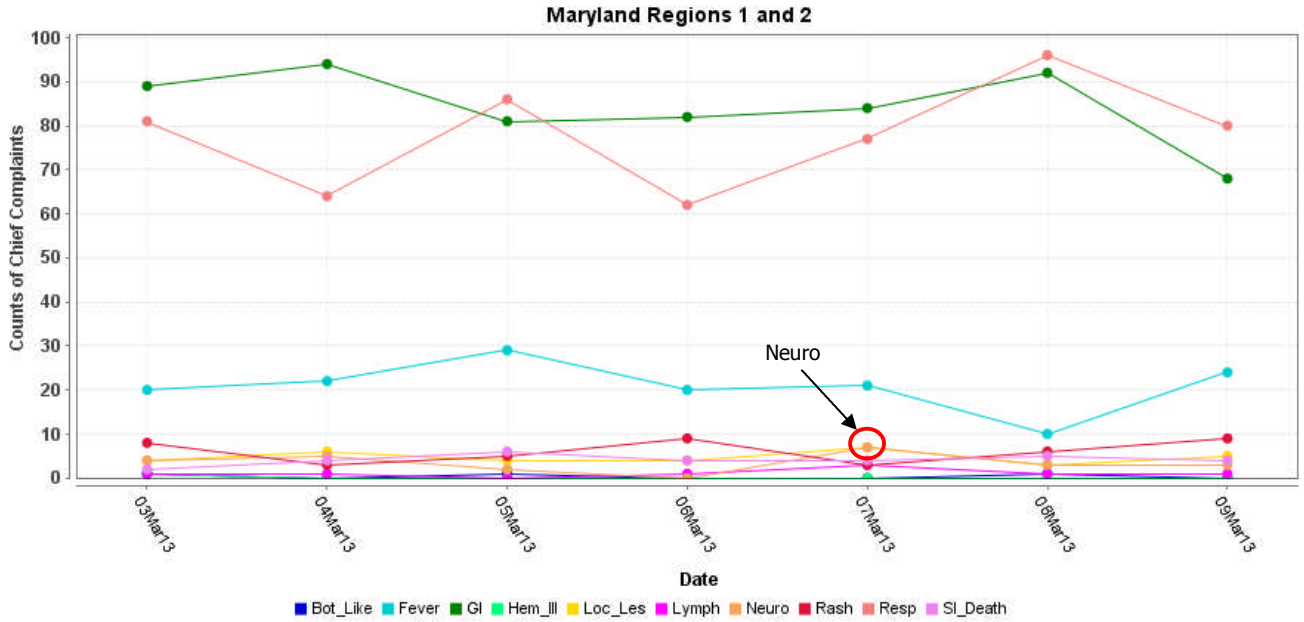
National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

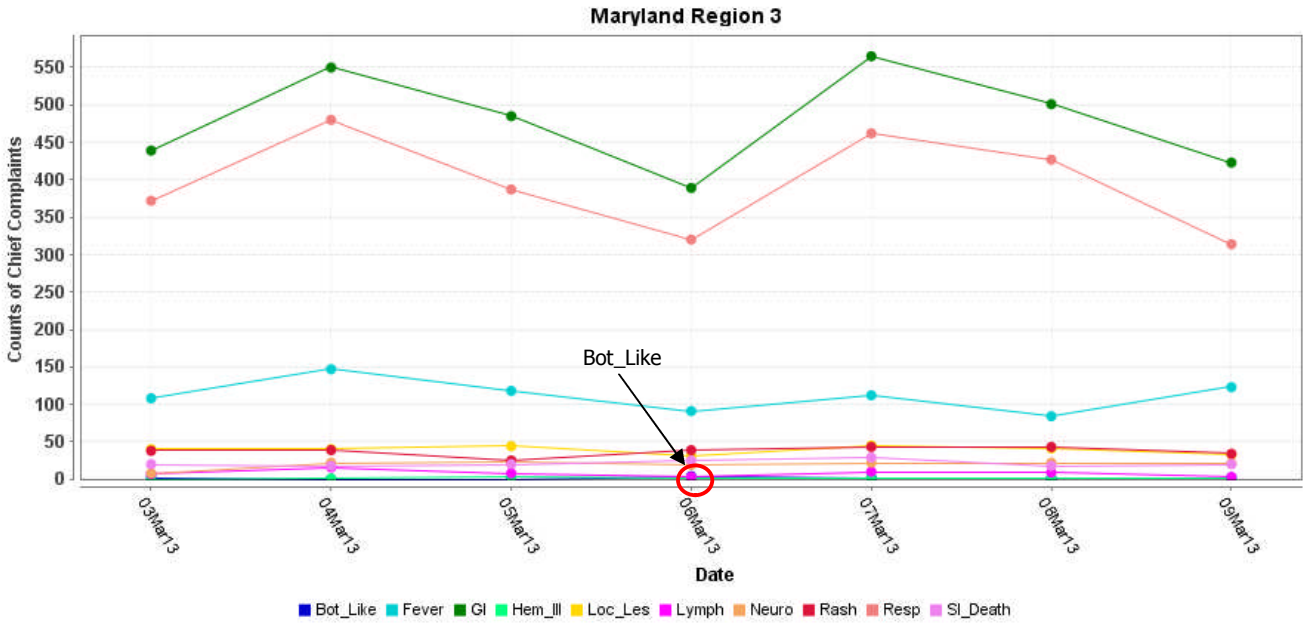


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

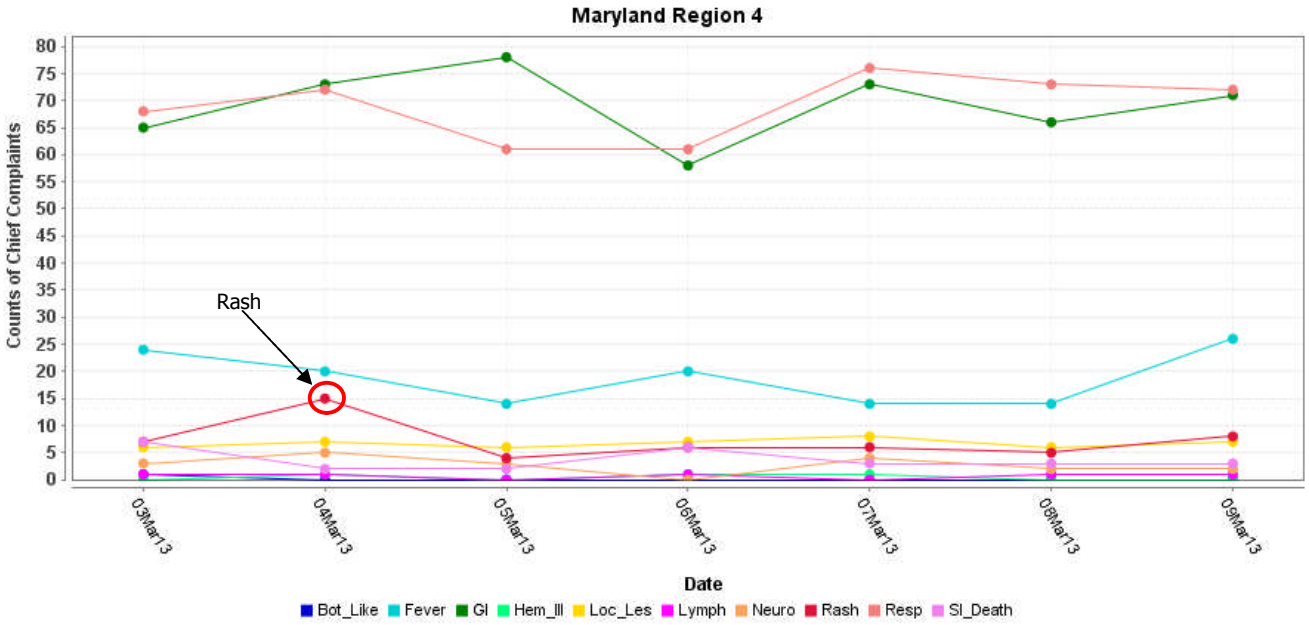
MARYLAND ESSENCE:



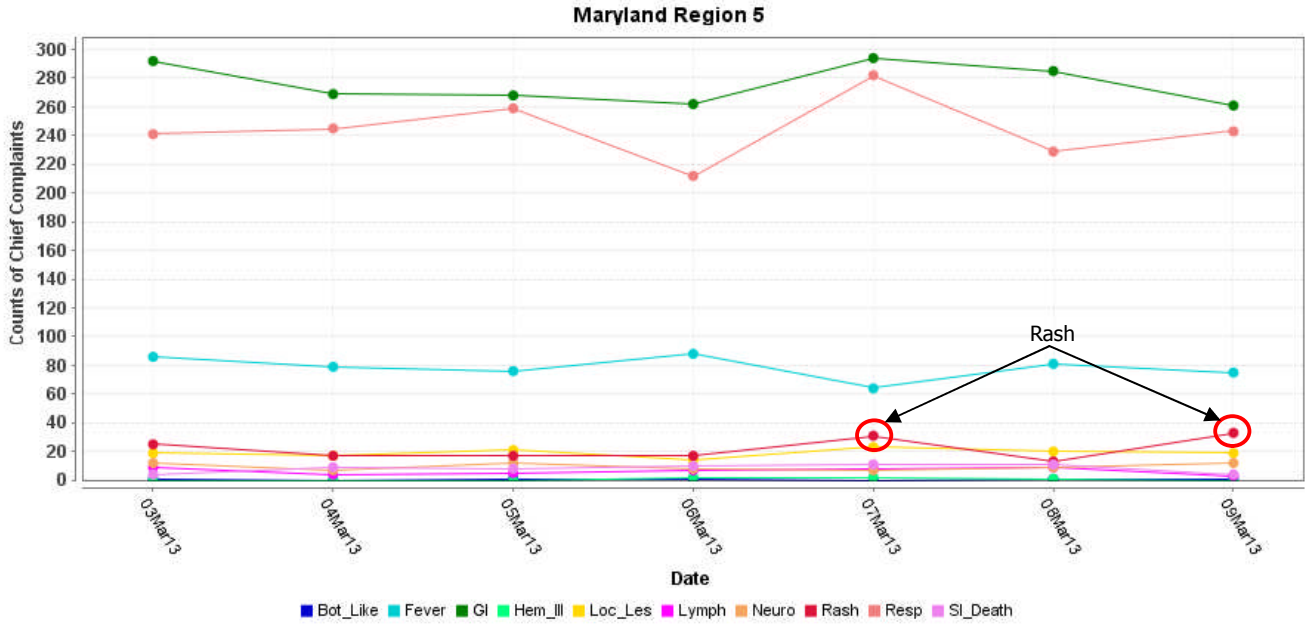
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



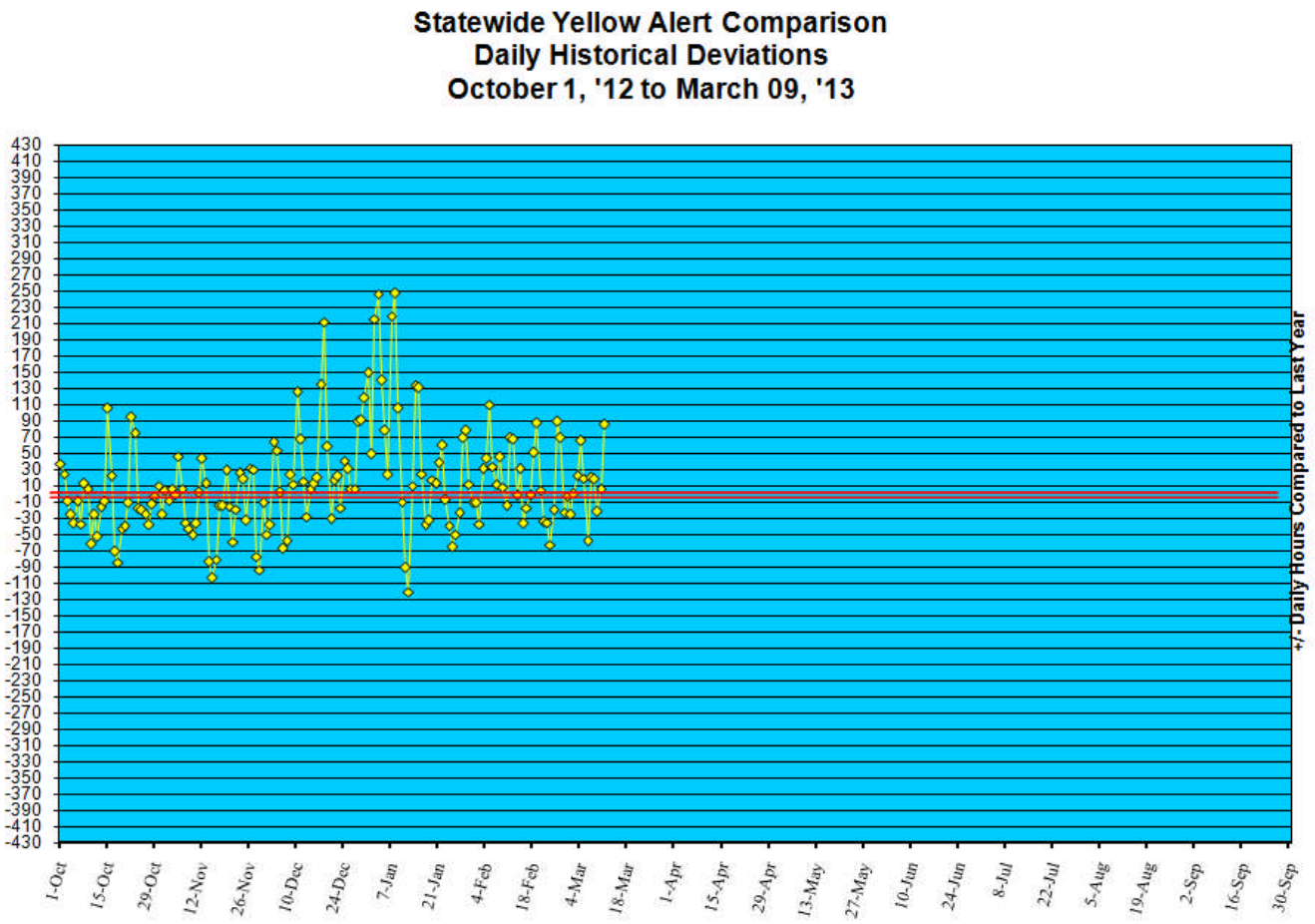
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in January 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (March 3 – March 9, 2013):	7	0
Prior week (February 24 – March 2, 2013):	7	0
Week#10, 2012 (March 5 – March 11, 2012):	10	0

6 outbreaks were reported to DHMH during MMWR Week 10 (March 3-9, 2013)

6 Gastroenteritis Outbreaks
2 outbreaks of GASTROENTERITIS in Nursing Homes
3 outbreaks of GASTROENTERITIS in Assisted Living Facilities
1 outbreak of GASTROENTERITIS in an Adult Daycare Center

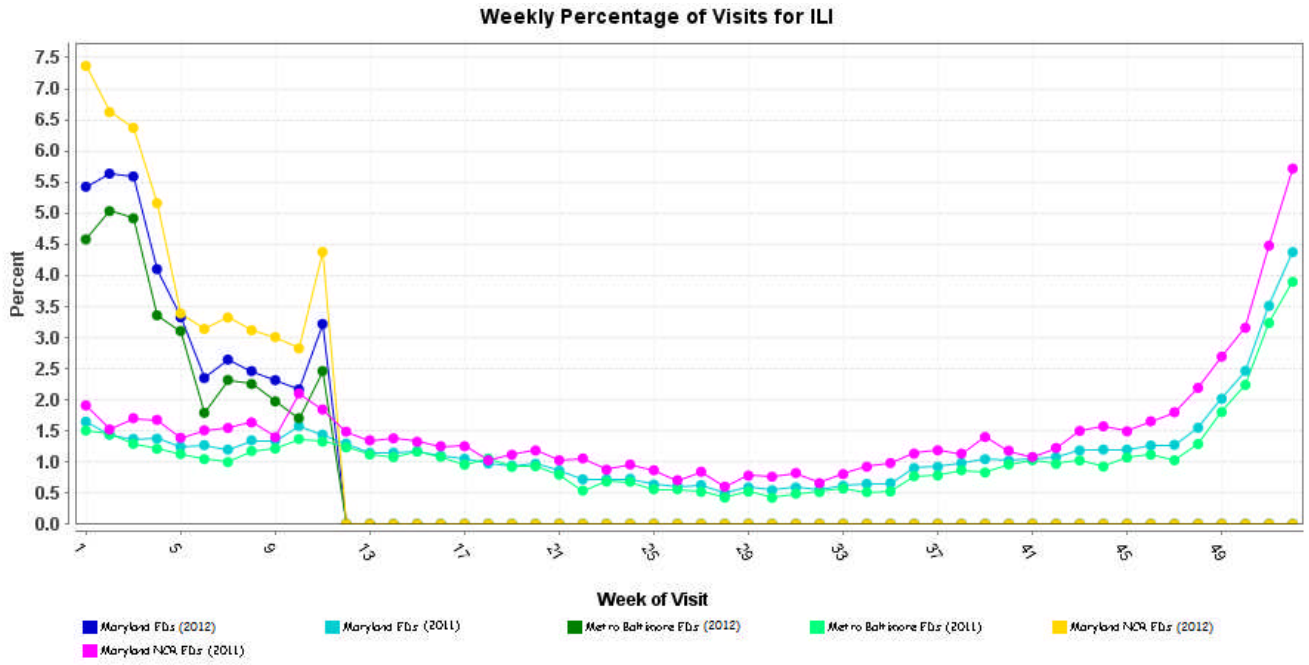
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 10 was: Sporadic Activity with Moderate Intensity.

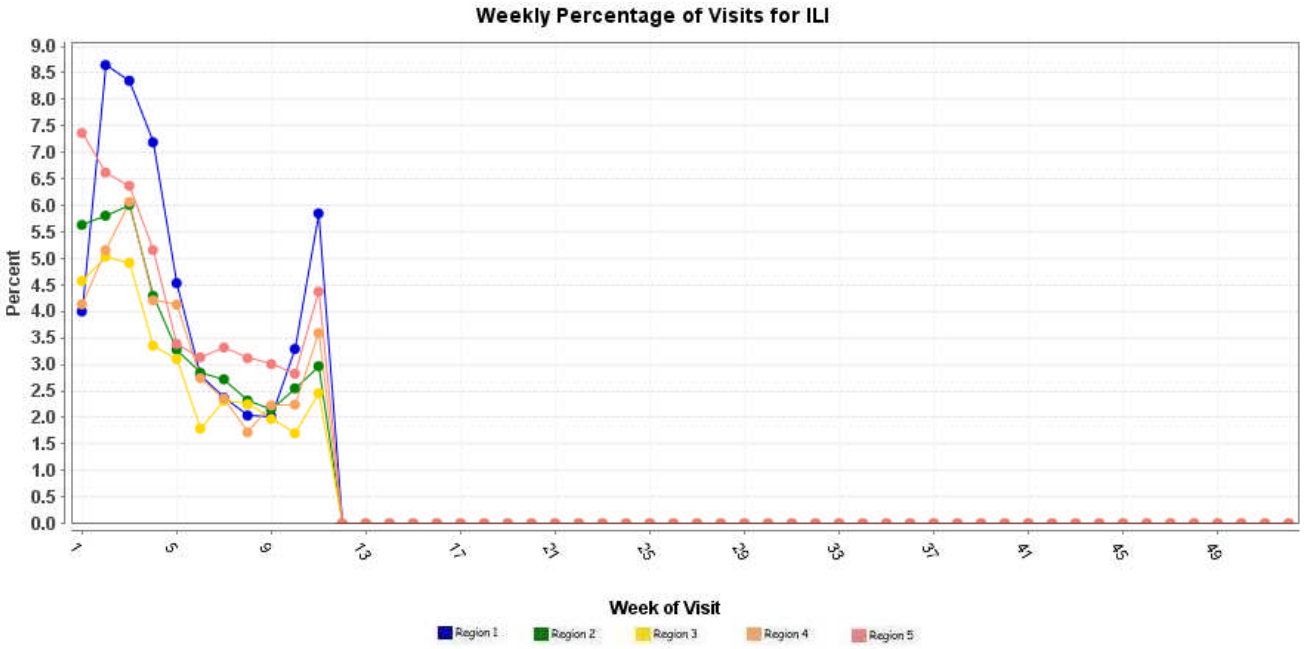
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



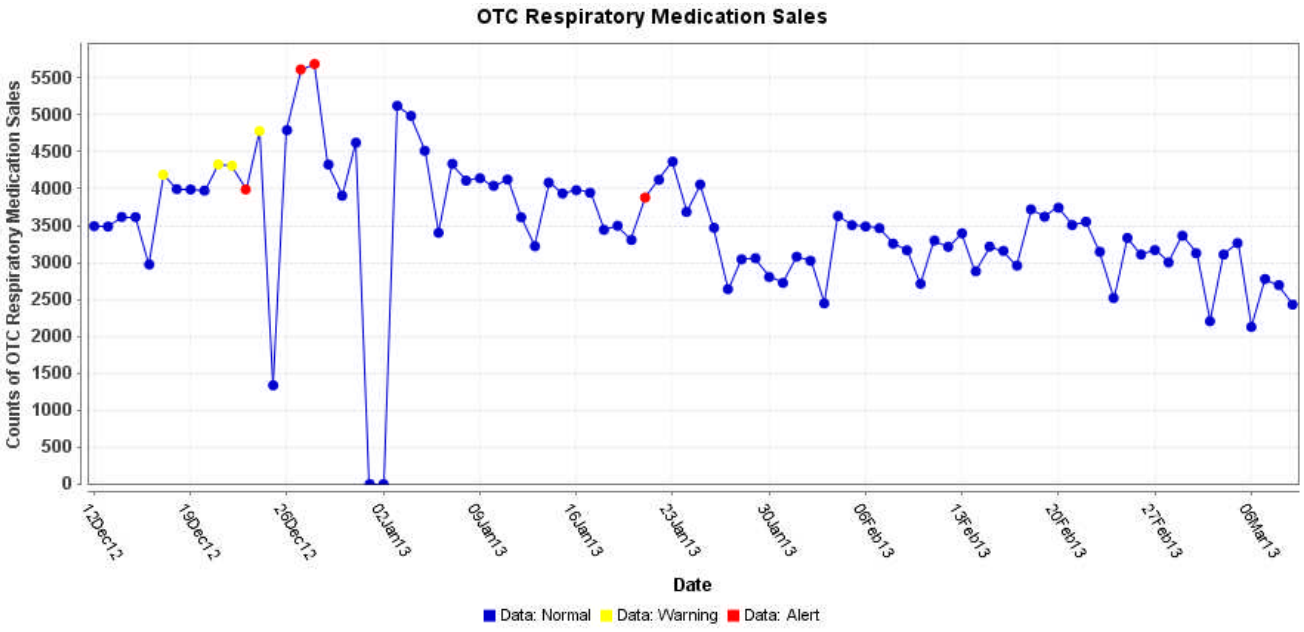
* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2013 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic. As of February 15, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 620, of which 367 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

NATIONAL DISEASE REPORTS*

CAMPYLOBACTERIOSIS (ALASKA): 5 March 2013, State health officials said Monday, 5 Mar 2013, that a total of 24 people have fallen ill, 2 of whom were hospitalized, after drinking tainted raw milk from a Kenai Peninsula dairy. Among the ill is an infant who did not directly imbibe the raw milk, but got sick through a secondary transmission from an adult who had. State epidemiologists said the illnesses are the result of milk tainted with *Campylobacter*, a bacterium commonly found in cow manure. After receiving multiple reports of sick people, state health officials traced the source of the outbreak to a cow share program at the Peninsula Dairy. State veterinarians visited the farm to take samples and said the farm owner is being cooperative with their investigation. Dr. Brian Yablon, an epidemiologist with the State of Alaska, said that, with raw milk, infections like this are virtually unavoidable. "The bottom line for any operation that is providing raw milk," Yablon said, "[is] there's no way to make a sterile product... and that's why, from a public health perspective, we encourage people if they're going to drink milk, to just drink pasteurized milk." Backers of the nationwide raw milk movement have claimed that unpasteurized, unhomogenized raw milk -- from appropriately clean farms -- can provide a range of health benefits. But Yablon said the realities of milk production make raw milk inherently risky. "No matter how safe the process is thought to be, there is always potential for contamination," he said. "You have the absolute best of intentions, and the best of practices, but just the way the cow's anatomy is, the udder being so close to where the cow is excreting, the fact that the tail can flick things around, there are many different steps along the way where contamination can be introduced." The last outbreak of campylobacteriosis state epidemiologists dealt with was from a 2011 outbreak in the Mat-Su Valley that sickened 18 people. That outbreak was also linked to raw milk from a cow-share program. "It's just not a product that's ever going to be 100 percent safe," Yablon said. "There's always the potential for contamination, and this is the latest example here in Alaska." (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

CRYPTOSPORIDIOSIS (AUSTRALIA): 8 March 2013, The Department of Health is working with public swimming pool operators in Melbourne to try to prevent a [gastroenteritis] outbreak from spreading. The department received 155 notifications of people suffering gastro last month [February 2013], which is 3 times the monthly average. The Victorian Chief Health Officer, Dr Rosemary Lester, says some of those cases have been linked to swimming pools. She says pool operators have been instructed to clean pools and increase the amount of chlorine in the water. "We've been working with pool owners to make sure that happens," she said. "We're also making sure they have appropriate signage for their patrons about pool hygiene. "That's making sure patrons shower before swimming and that they don't swim if they have diarrhea or for 14 days afterward." The bug is caused by the cryptosporidium parasite, which is found in the human and animal feces. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS (ENGLAND): 8 March 2013, More people have tested positive for salmonella following a sickness outbreak linked by health officials to a spicy food street festival. The total affected with sickness and diarrhea has risen from 200 to 250 since figures were released on Thursday [7 Mar 2013] after the Street Spice event last week [28 Feb-2 Mar 2013] in Newcastle. Health officials said that 8 people had tested positive for salmonella, which has doubled from the 4 already announced. Newcastle City Council is trying to identify the source of the sickness which has struck down some of the 12 000 people who attended the event. Officials want anyone who was there, whether they fell ill or not, to complete a confidential online questionnaire at http://tinyurl.com/streetspice. Stephen Savage, director of regulatory services and public protection, said: "The event organizers are cooperating fully and we are continuing to investigate the source of the outbreak. "Please can anyone with symptoms contact Regulatory Services and Public Protection at the City Council on 0191 278 7878." Dr Kirsty Foster, of the Health Protection Agency and chair of the outbreak control team, said: "Initial investigations have not yet identified a definite source of infection however we are working closely with the organizers of the event to determine the source of infection. "Anyone who is concerned about symptoms suggesting salmonellosis should contact their GP or out of hours service in the 1st instance. Those affected should not return to their place of work until their symptoms have ceased for 48 hours." (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

HANTAVIRUS (URUGUAY): 8 March 2013, A 17-year-old youth who worked as a ranger in the rural area of the Colonia department died as a result of a hantavirus infection, as confirmed to El Pais digital sources of the Ministry of Public Health [MSP]. This case is isolated, the sources explained, and now studies of the family and friends are done with no indication of symptoms. The Office of the Director of Health of the department assessed the area where the youth could have contracted the virus. The hantavirus [infections] are registered sporadically in Uruguay. The 1st case was registered in 1997 and up to 2010 all the cases have been registered only south of Rio Negro. In January [2013] the MSP has requested [that people adopt] extreme precautions and classified the disease as emerging. The virus is present in feces, urine and saliva of mice that when dried remain in the dust deposited in the soil and other surfaces, and get into the air as aerosols. Because of this, the MSP recommends that houses and rooms that have remained closed for a lot of time be ventilated for at least 30 min before being entered for cleaning. People must take precautions to not breathe the dust. Hantavirus [infections] produce fever over 38 C [100.4 F], chills, thirst and headache. In 2012, there were 13 infected people, more than double in 2011 when there were 6 cases. In 2012, 2 of the infected people died. (Hantavirus is listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable